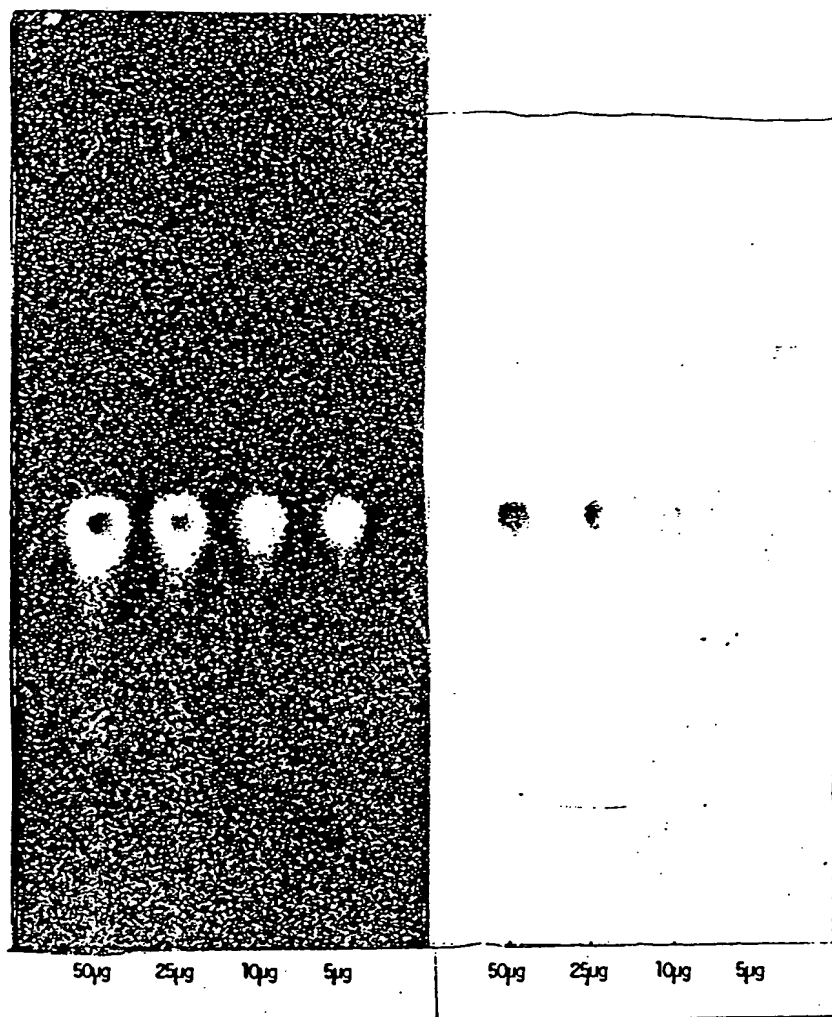


Fig. 1

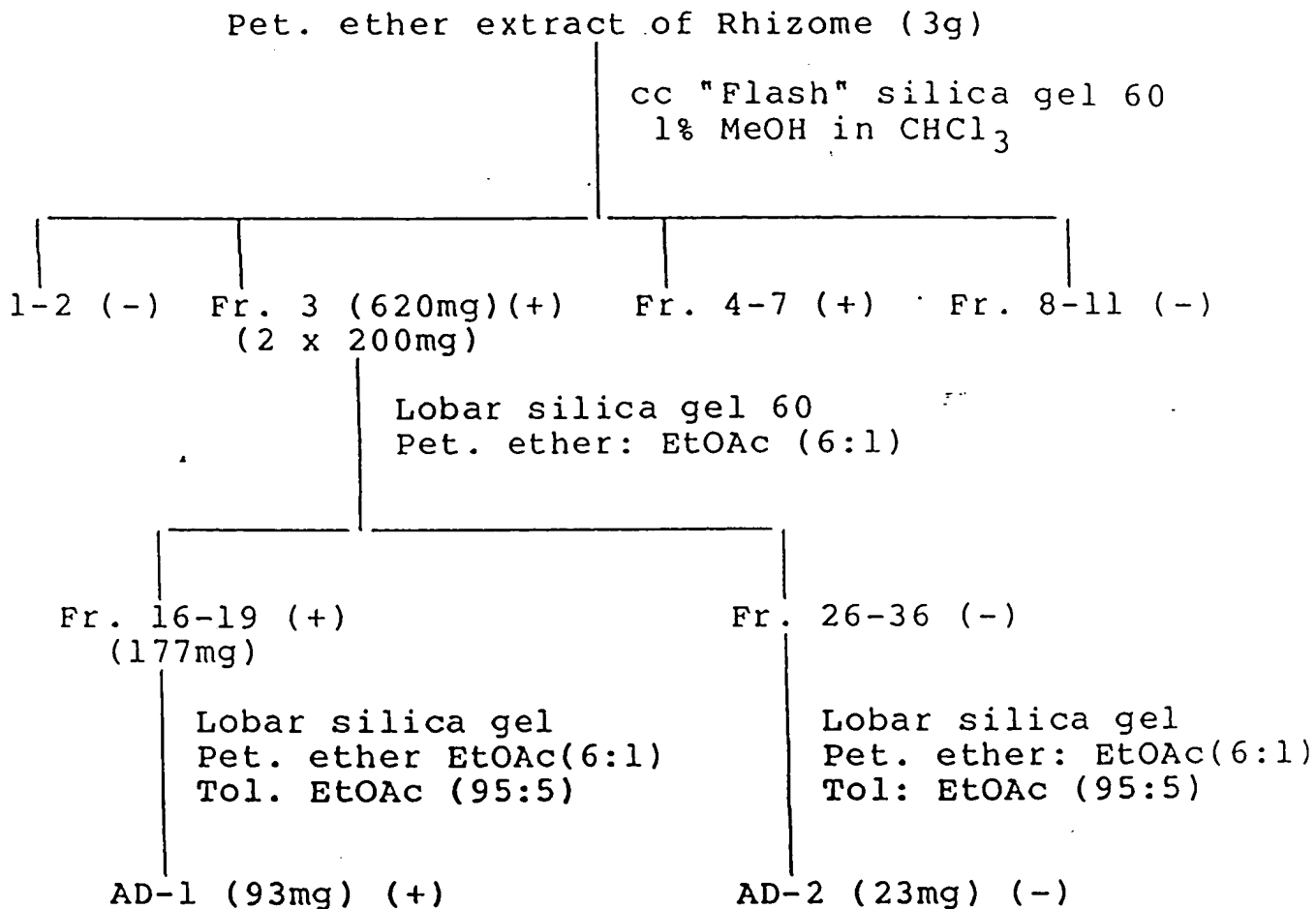
ANTIFUNGAL ACTIVITY OF Labda-8(17),12-diene-15,16-dial  
(AD-1) AGAINST Cladosporium cucumerinum AT DIFFERENT  
CONCENTRATIONS



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Fig. 2

SCHEME FOR THE ISOLATION OF ANTIFUNGAL CONSTITUENTS OF  
Aframomum daniellii K. Schum (Fam. Zingiberaceae)



+ active

- inactive

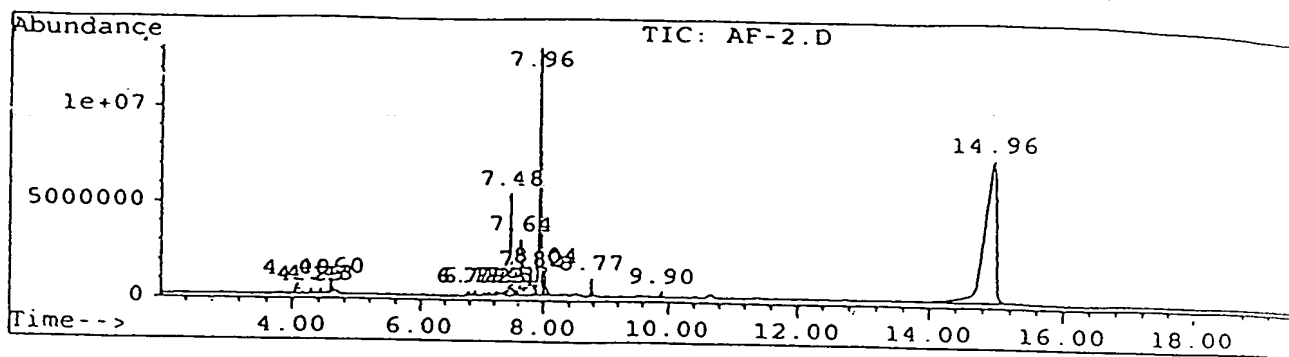


Fig 2A

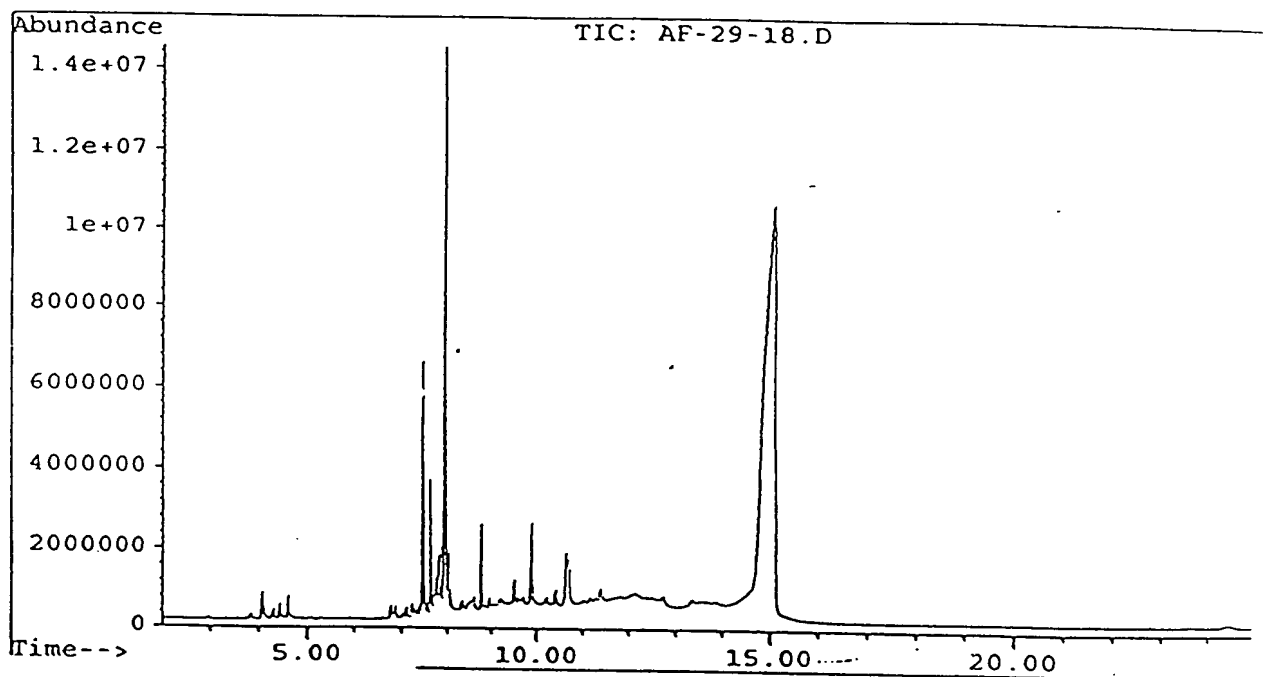


Fig 2B

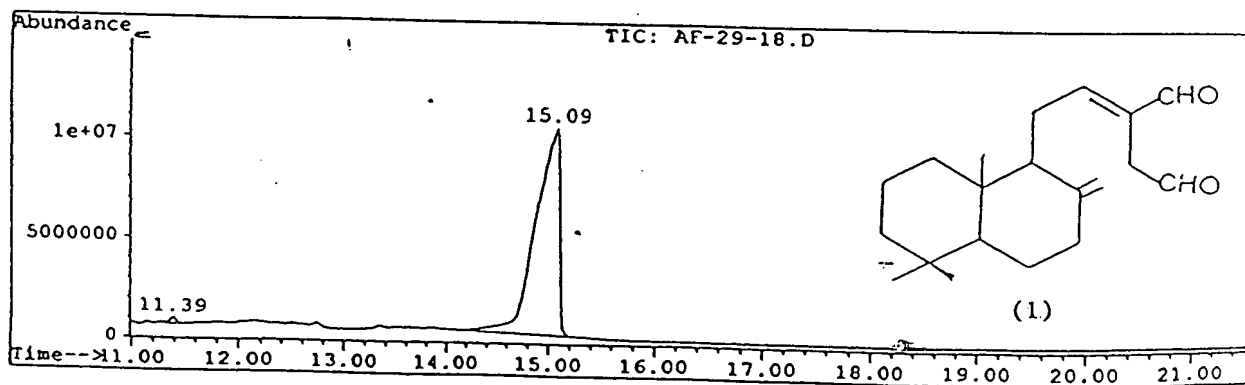


Figure 2C

2D

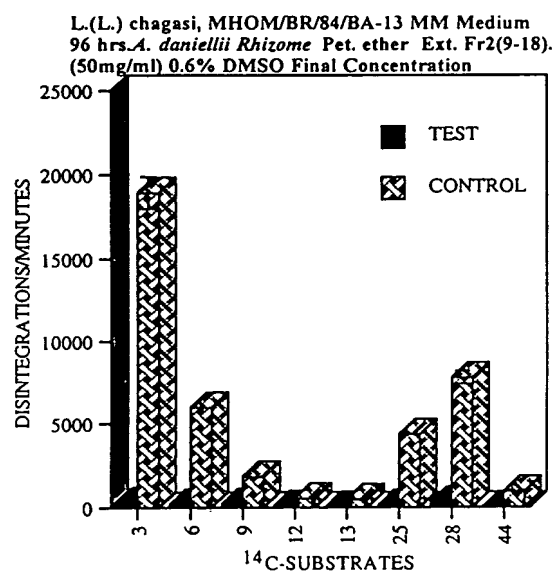


Figure 2D

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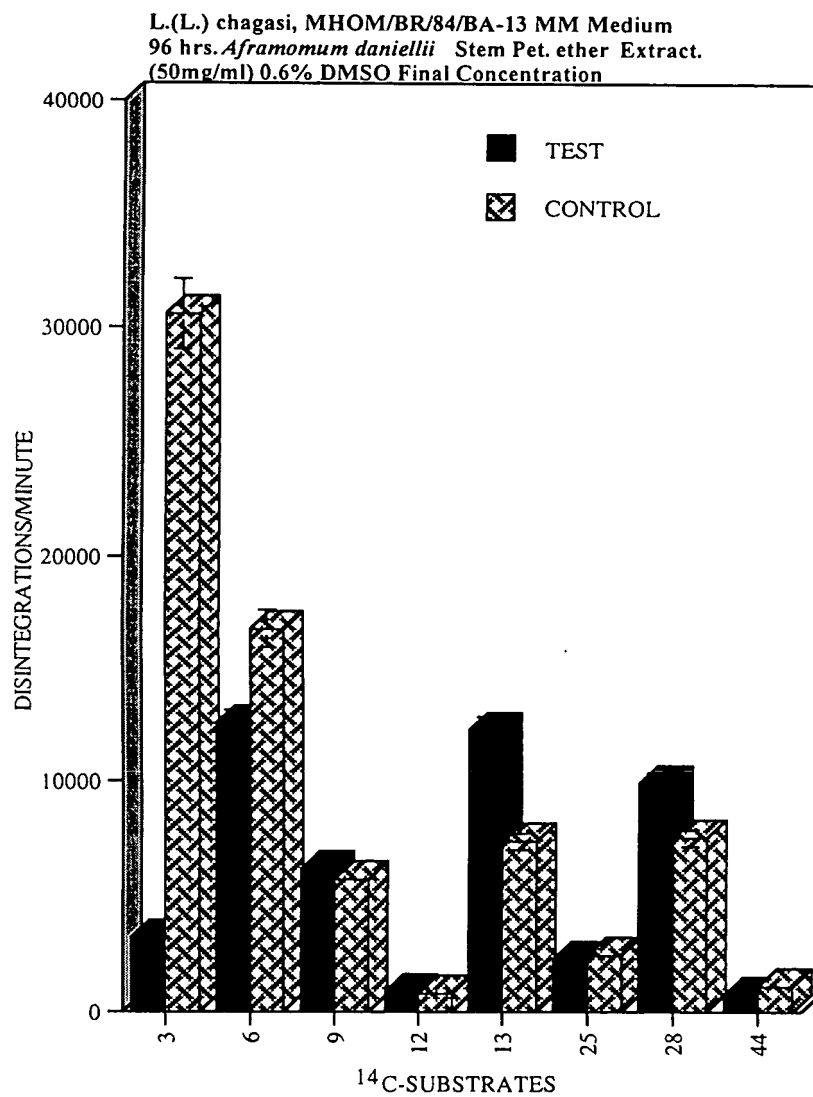
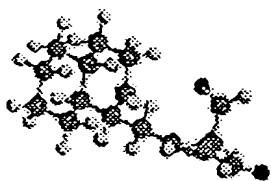
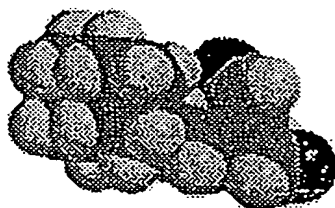


FIGURE 2E

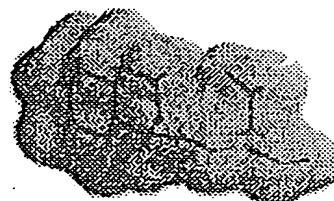
# Molecular Representation of Labda-8 (17), 12-diene-15,16- dial (Diterpene Dialdehyde)



ball & stick model



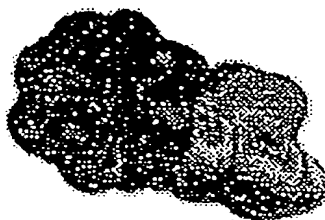
space-filling model



total electron density surface



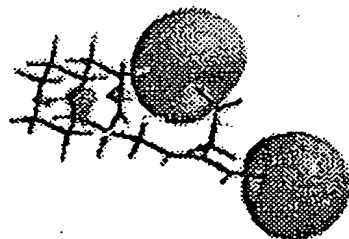
MEP onto total electron density surface



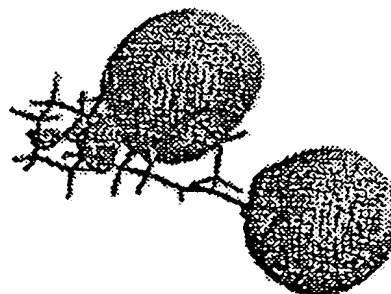
LUMO surface



HOMO surface



Isopotential surface at  
-10.0 kcal/mol



Isopotential surface at  
-5.0 kcal/mol

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FIG. : ~~2B~~ 2F

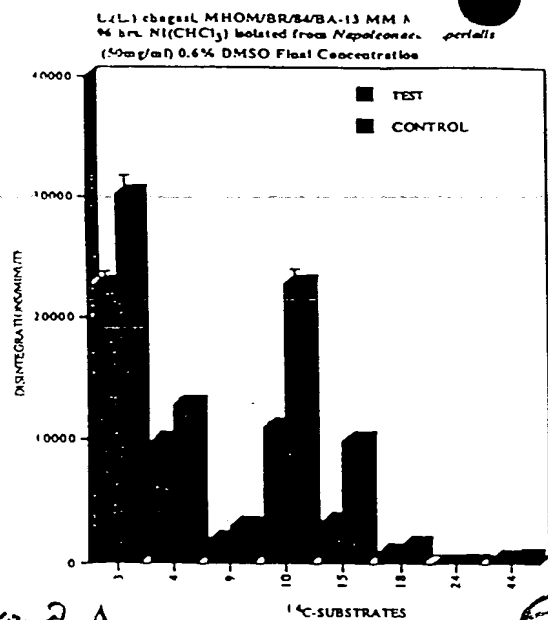


Fig. 3 A

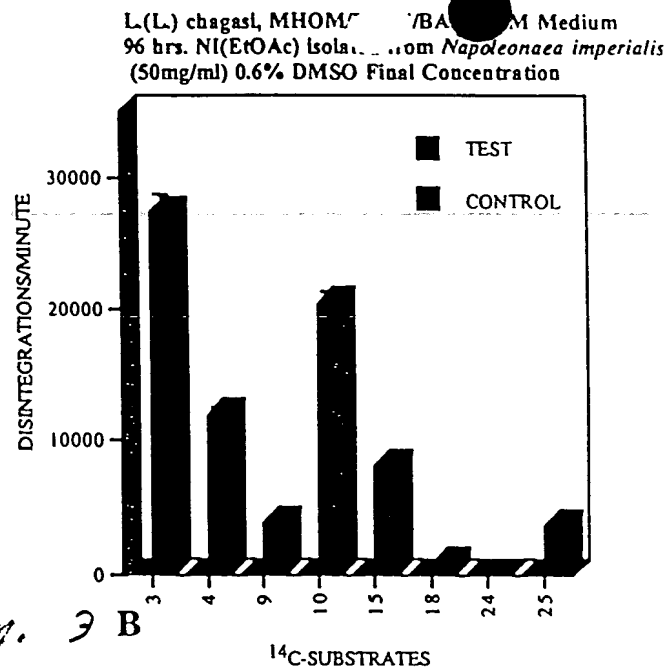


Fig. 3 B

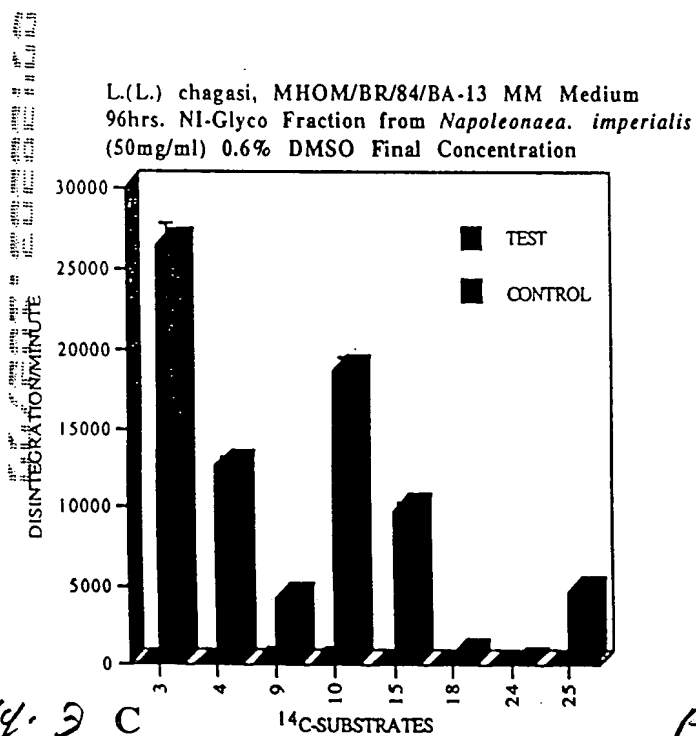


Fig. 3 C

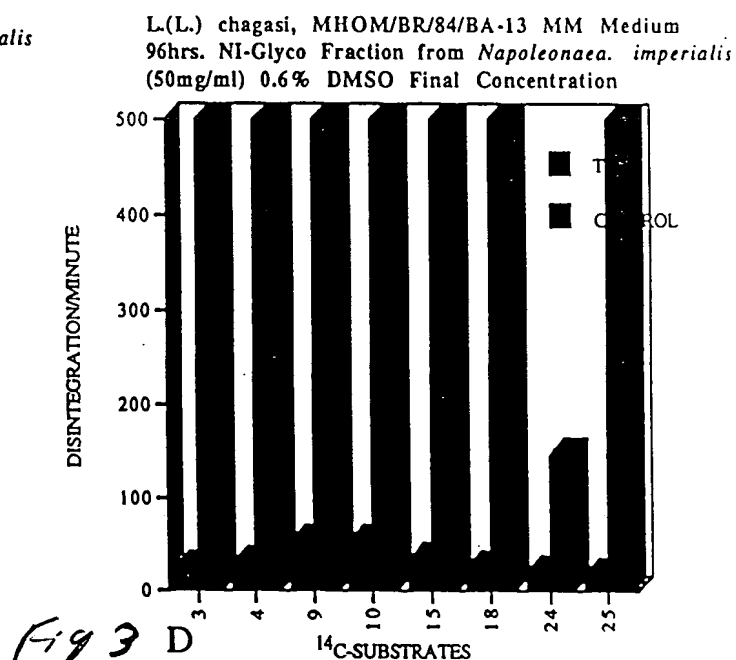


Fig. 3 D

Figure 3 Test results from *Napoleonaea imperialis*.  
At 50µg/ml suppression of parasite catabolism of 8 of <sup>14</sup>C-Substrates occurred

L.(L.) chagasi, MHOM/BR/84/b...13 MM Medium  
96 hrs. Non-sap isolated from *Napoleonaea imperialis*  
(50mg/ml) 0.6% DMSO Final Concentration

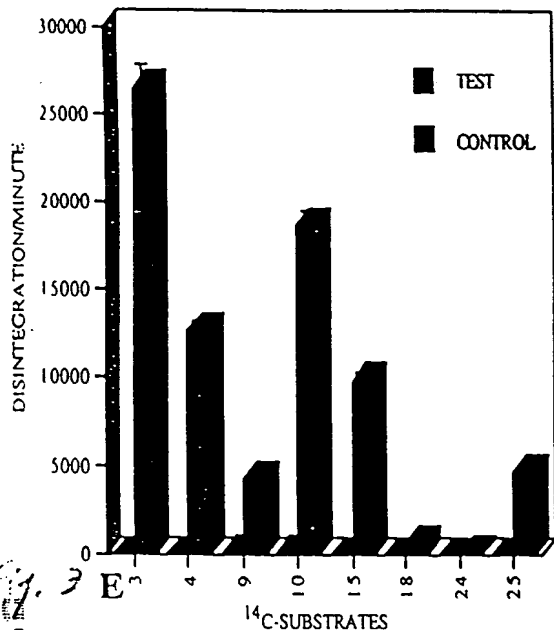


Fig. 3 E

L.(L.) chagasi, MHOM/BR/84/BA-13 MM Medium  
96 hrs. NI-3 isolated from *Napoleonaea imperialis*  
(50mg/ml) 0.6% DMSO Final Concentration

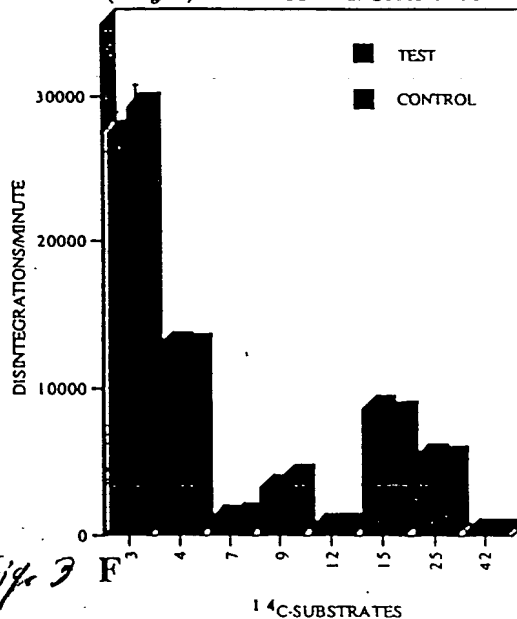


Fig. 3 F

L.(L.) chagasi, MHOM/BR/84/BA-13 MM Medium  
96 hrs. NI-4 isolated from *Napoleonaea imperialis*  
(50mg/ml) 0.6% DMSO Final Concentration

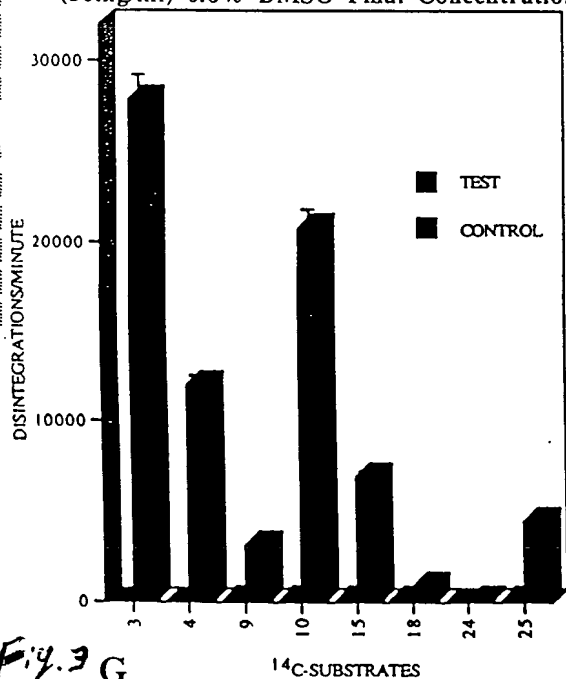


Fig. 3 G

L.(L.) chagasi, MHOM/BR/84/BA-13 MM Medium  
96 hrs. NI-5 isolated from *Napoleonaea imperialis*  
(50mg/ml) 0.6% DMSO Final Concentration

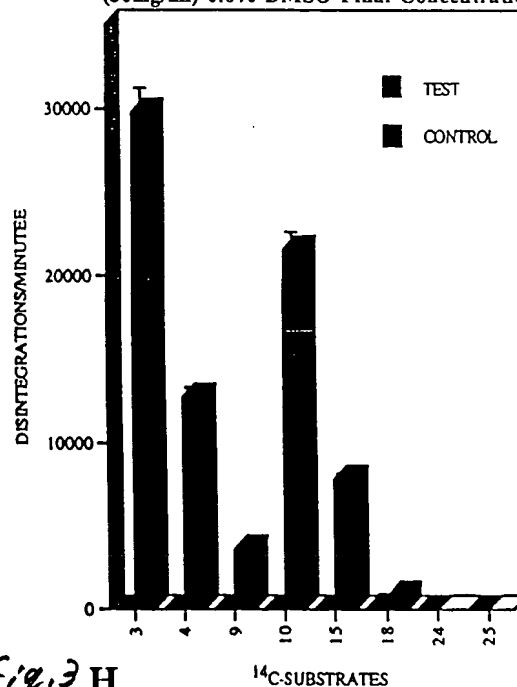


Fig. 3 H

Figure 3 Test results from *Napoleonaea imperialis*..  
At 50μg/ml suppression of parasite catabolism of 8 of <sup>14</sup>C-Substrates occurred

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Data File C:\HPCHEM\1\DATA\0050396C.D

Sample Name: E00 60.

6"90:10-40"30:70 Water:ACN long C18 column  
1/min DAD 254nm

1.0m

Acq. Method : IRDBAY.M

Seq. Line : -

Acq. Operator : dgbg

Vial : 100

Sample Name : E00 60/45

Inj : -  
Inj Volume : 10 µl

Analysis Method : C:\HPCHEM\1\METHODS\IRDBAY.M  
(modified after loading)

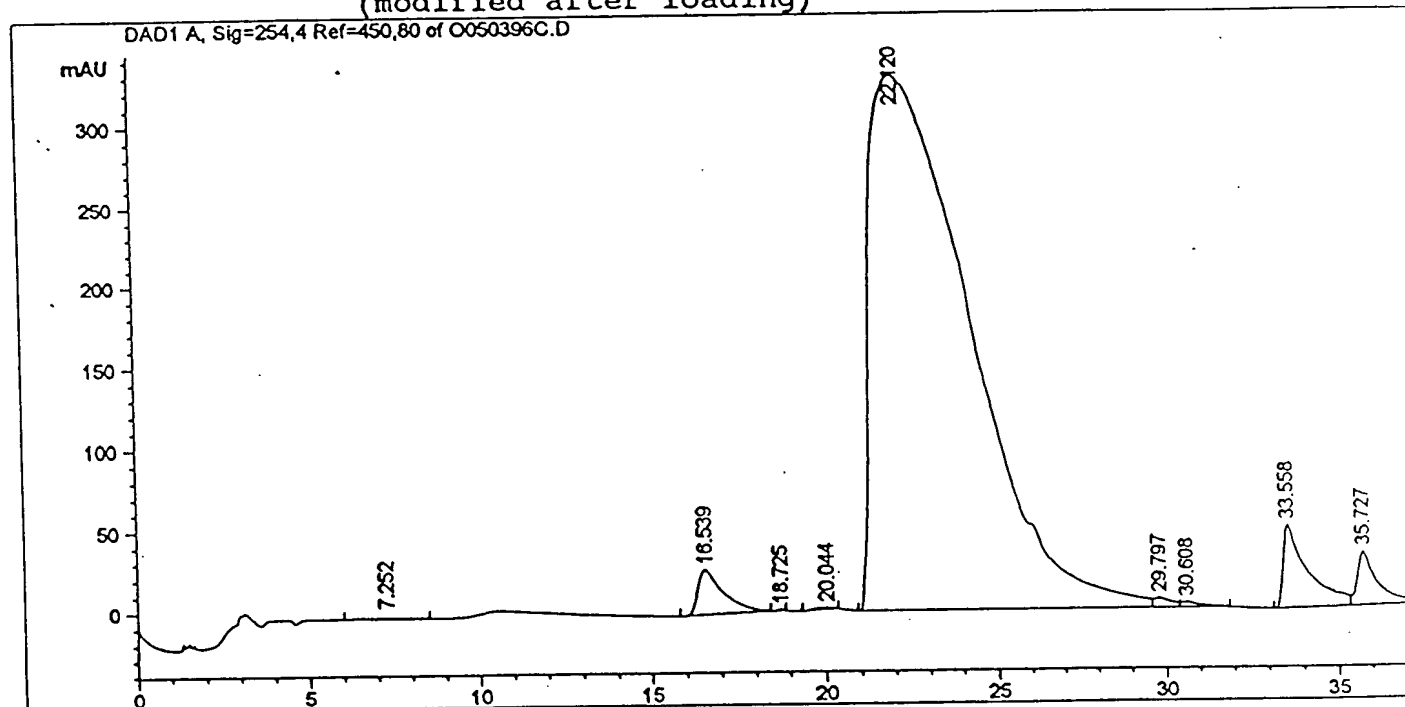


Figure 3I Liquid Chromatographic Separation of *Eupatorium odoratum*

Antileishmanial Fraction E00 60-104.

A

FIG 4

-MICROVOLTS/SECOND

3 VEHICLE CONTROLS (RED & BLUE & LT. GREEN)

12.5 UG/ML "NI" CRUDE PLANT EXTRACT  
(PURPLE & AQUA)

25 UG/ML "NI" (DARK GREEN)

50 UG/ML "NI" (YELLOW & PINK SUPERIMPOSED)

Chamber A	1st Fluid
Chamber B	1st Fluid
Chamber C	1st Fluid
Chamber D	1st Fluid
Chamber E	1st Fluid
Chamber F	1st Fluid
Chamber G	1st Fluid
Chamber H	1st Fluid

TIME (HH: MM: SS)

Figure 4A

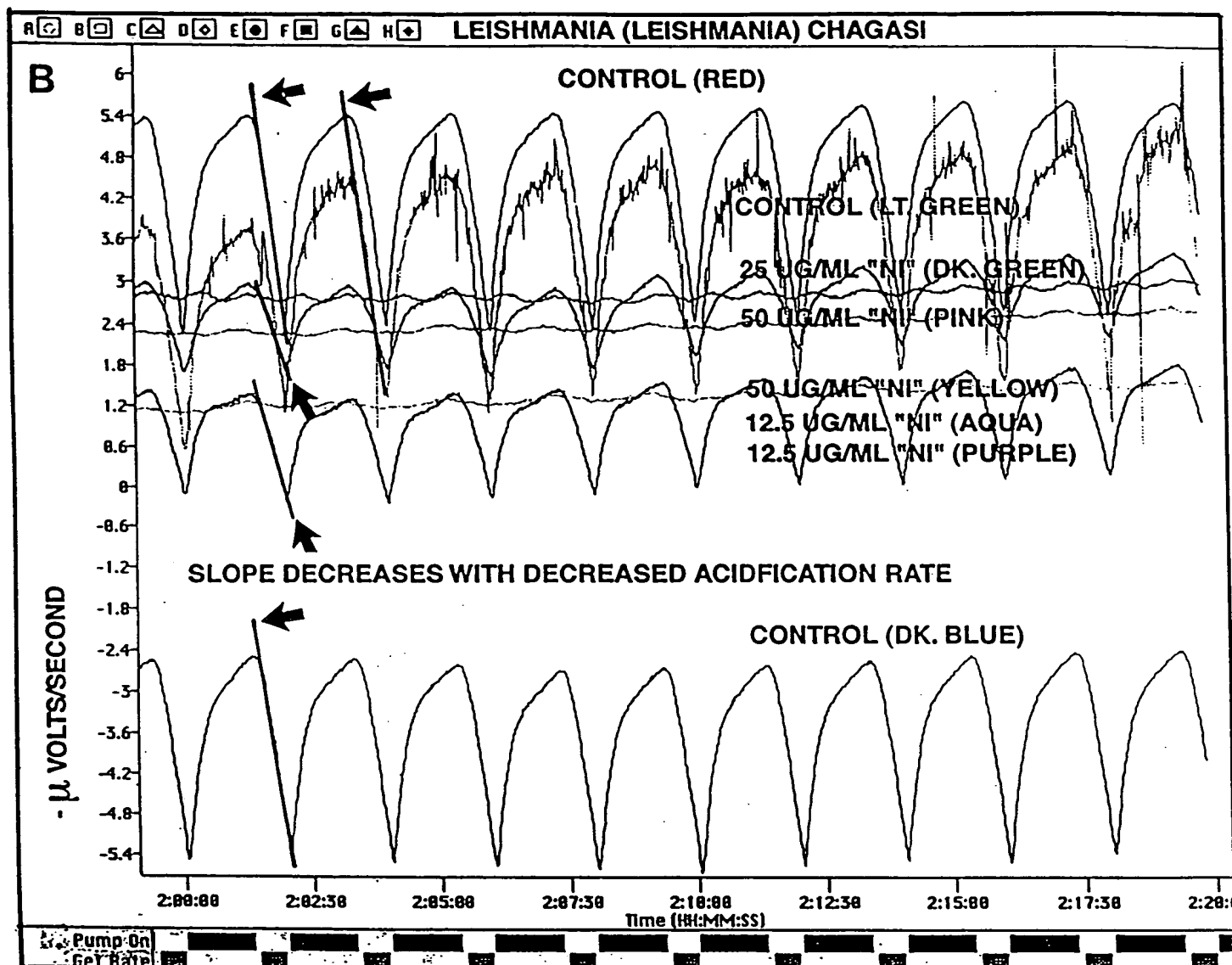


Figure 4B

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C

# LEISHMANIA (LEISHMANIA) CHAGASI

## 3VEH. CONTROLS

12.5 UG/ML "NI"  
PURPLE & AQUA

25 UG/ML "NI"  
DARK GREEN

50 UG/ML "NI"  
YELLOW & PINK

6:50:00

7:00:00

7:10:00

7:20:00

7:30:00

TIME (HH: MM:SS)

+7 HRS

Chamber P  
Chamber E  
Chamber C  
Chamber D  
Chamber E  
Chamber F  
Chamber G  
Chamber H

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Figure 4C

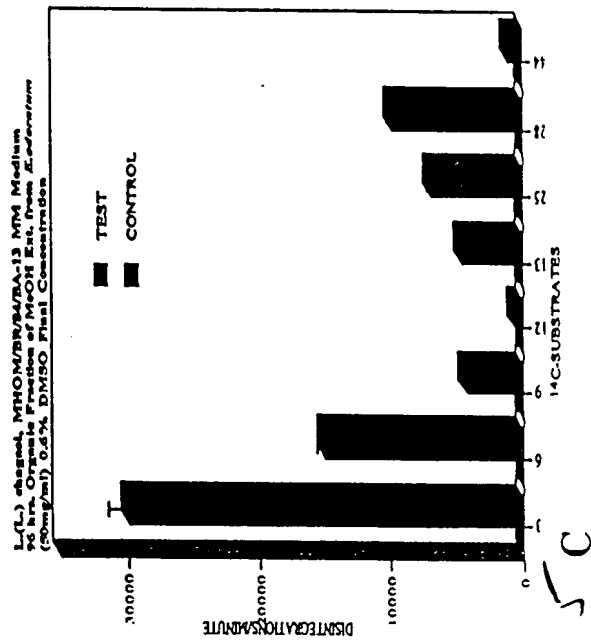
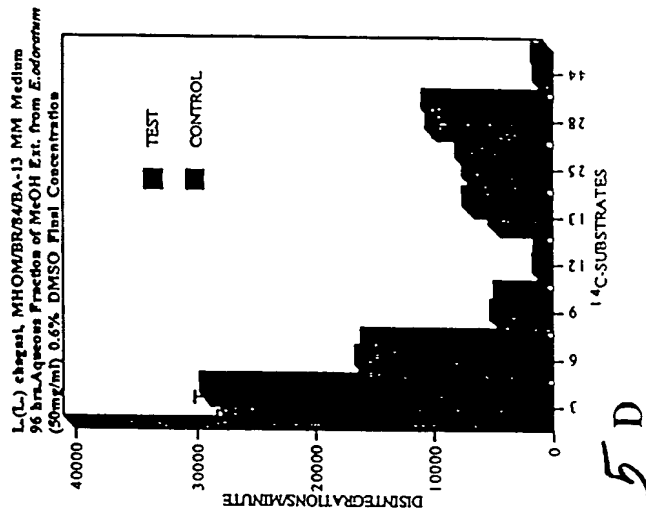
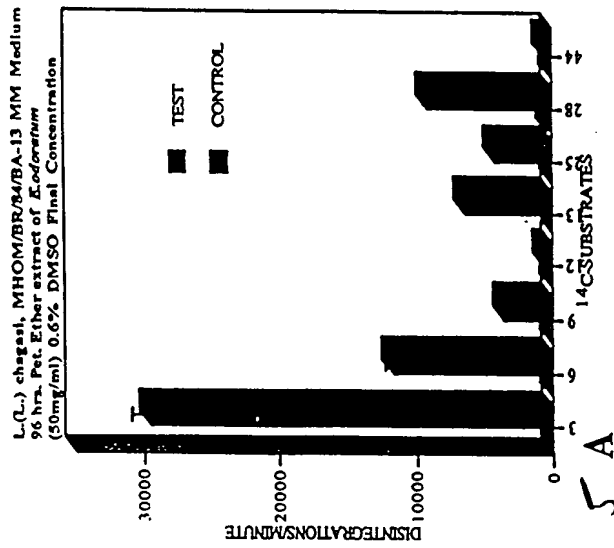
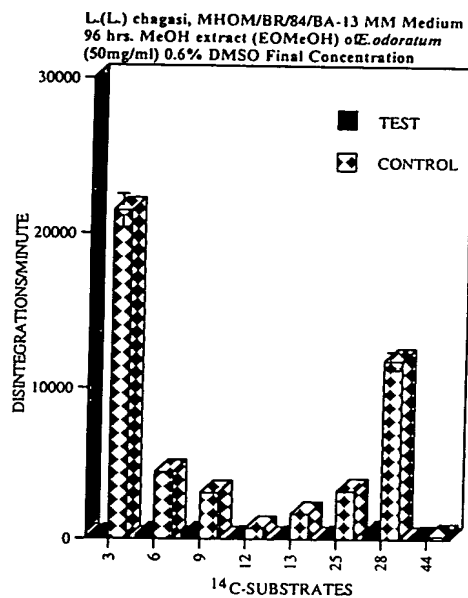


Figure 5

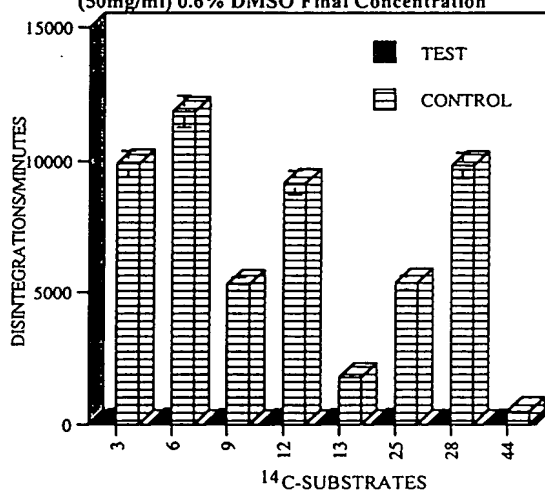
Fig. 5B



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Fig 5E

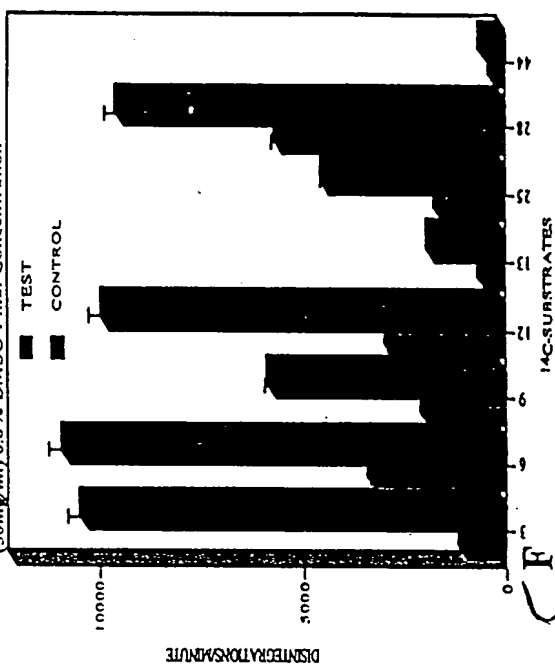
L.(L.) chagasi, MHOM/BR/84/BA-13 MM2 Medium  
96 hrs.Fraction EOO60-104/BN59168 from *E.odoratum*  
(50mg/ml) 0.6% DMSO Final Concentration



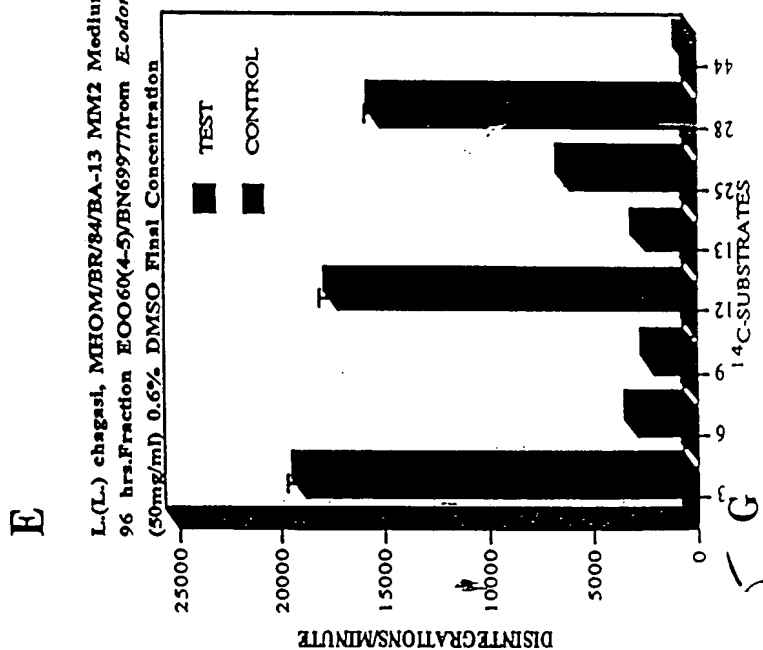
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L.(L.) chagasi, MHOM/BR/84/BA-13 MM2 Medium  
96 hrs. Fraction EOO105/BN59177 from *E. odoratum*  
(50mg/ml) 0.6% DMSO Final Concentration



L.(L.) chagasi, MHOM/BR/84/BA-13 MM2 Medium  
96 hrs. Fraction EOO60(4-5)/BN69977 from *E. odoratum*  
(50mg/ml) 0.6% DMSO Final Concentration



L.(L.) chagasi, MHOM/BR/84/BA-13 MM Medium  
96 hrs. Fraction EOO 60(7-9)/BN69986 from *E. odoratum*  
(50mg/ml) 0.6% DMSO Final Concentration

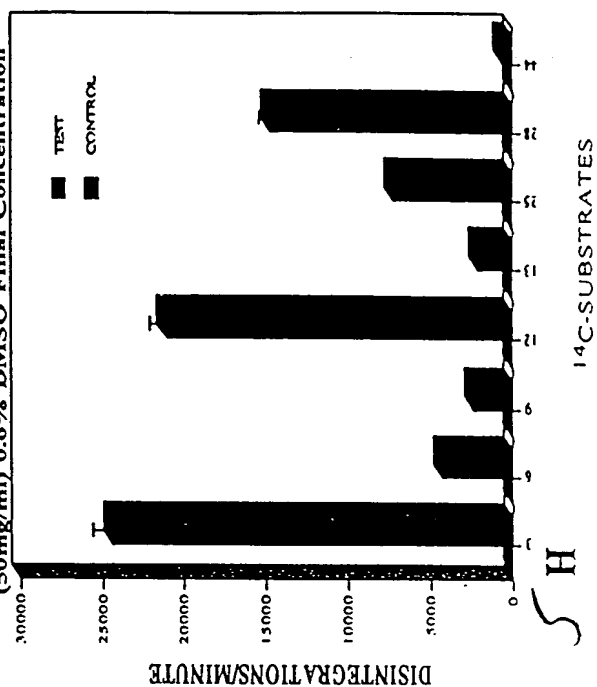


Figure 5



Fig. 6

TABLE 1

Numeric code abbreviations of  $^{14}\text{C}$ -substrates used for drug tests\*

<u>Numeric Code</u>	<u><math>^{14}\text{C}</math>-Substrates†</u>	<u>Commercial Source</u>
2	L-Arginine (guanidino- $^{14}\text{C}$ )	A++
3	L-Aspartic Acid (4- $^{14}\text{C}$ )	A
4	L-Asparagine (U- $^{14}\text{C}$ )	A
5	L-Glutamic Acid (U- $^{14}\text{C}$ )	A
6	L-Glutamine (U- $^{14}\text{C}$ )	A
7	Glycine (U- $^{14}\text{C}$ )	A
9	L-Isoleucine (U- $^{14}\text{C}$ )	A
10	L-Leucine (1- $^{14}\text{C}$ )	A
12	L-Methionine (1- $^{14}\text{C}$ )	A
13	L-Ornithine (1- $^{14}\text{C}$ )	A
15	L-Proline (U- $^{14}\text{C}$ )	A
17	Taurine (U- $^{14}\text{C}$ )	A
18	L-Threonine (U- $^{14}\text{C}$ )	A
20	Tyramine (7- $^{14}\text{C}$ )	A
24	L-Fucose (1- $^{14}\text{C}$ )	A
25	D-Galactose (1- $^{14}\text{C}$ )	A
28	D-Mannose (1- $^{14}\text{C}$ )	A
42	Orotic Acid (carboxyl- $^{14}\text{C}$ )	Nss
44	Succinic Acid (1,4- $^{14}\text{C}$ )	N
46	Na-n-Butyric Acid (1- $^{14}\text{C}$ )	A
49	D-Glucosamine (1- $^{14}\text{C}$ )	A
52	Na-Glycocholic Acid (1- $^{14}\text{C}$ )	A
53	L-Methionine (methyl- $^{14}\text{C}$ )	A

TABLE 2.

*In vitro* Antimalarial Activity of Isolated Compounds  
Against Clones of *Plasmodium falciparum*

Compounds	Plant Source	IC <sub>50</sub> (μg/ml)	
		W <sub>2</sub> clone	D <sub>6</sub> clone
Labda-8(17),12-diene-15,16-dial (I)	<i>Aframomum daniellii</i>	96.66	280.18
Sakurenatin (II)	<i>Eupatorium odoratum</i>	164.95	123.88
Aulacocarpin (III)	<i>Aframomum aulocacarpus</i>	2224.72	146.72

FIGURE 7

Table 3.

### In vitro Activity of Plant Extract vs Growth of African Trypanosomes.

	EATRO 110	KETRI 243	KETRI 269	KETRI 243- As-10 3
<i>Picralima nitida</i> pfr2 SU-367	9.2	15.1	8.4	8.5
<i>Picralima nitida</i> pfr3 SU-369	1.1	6.1	8.2	11
<i>Picralima nitida</i> pfr4 SU-370	64	5	500g/ml-22%	500mg/ml-13%
<i>Aframomum melegueta</i> hex SU-766	102	21.5	500?g/ml-22%	47
<i>Aframomum aulocarpus</i> SU-787	9.0	8.5	12.6	14.9
<i>Aframomum melegueta</i> MeOHSU-798	8.4	7.2	15	30
<i>Aframomum melegueta</i> aq SU-813	500µg/ml-38%	500µg/ml-14%	500µg/ml-44%	500µg/ml-22%
<i>Gongronema latifolium</i> CHCl <sub>3</sub> SU-614	134	74	79	51
<i>Gongronema latifolium</i> ext SU-105	500µg/ml-16%	500µg/ml-8%	500µg/ml-7%	500µg/ml-8%
Grape seed2032 SU 719	1.9	2.0	1.6	3.4
<i>Albizia ferruginea</i> hex SU-679	18.0	19.6	28.9	40.55
<i>Uvaria chamae</i> rt DCM SU-799	115	229	114	117
<i>Morinda lucida</i> DCM SU-740	33	32.5	30.0	39.0
<i>Dracaena mannii</i> pDM-X SU-175	6.5	5.4	6.8	6.2
<i>Picralima nitida</i> PNP-2 SU-846	15.0	16.9	18.0	13.5
<i>Picralima nitida</i> PNP-4 SU-847	13.5	8.3	12.5	12.6
<i>Picralima nitida</i> PNP-8 SU-848	14.1	16.0	18.0	15.1
<i>Kigelia africana</i> MeOHSU-769	119	73.0	74	78
<i>Araliopsis tabouensis</i> MeOH frSU-724	6.4	64.0	59	105
<i>Araliopsis tabouensis</i> AT6compd SU1459	500	-	=	=
<i>Araliopsis tabouensis</i> AT7compd SU1458	100	-	-	-
<i>Aframomum aulocarpus</i> ( <i>aulococarpin</i> ) AZ2 SU-1460	0.86	-	-	-
<i>Dracaena mannii</i> Mannispirostan A SU1461	6.4	-	-	-
<i>Napoleonaea imperialis</i> Su-1462	1.75	-	-	-
<i>Mezoneurum benthamianum</i> SU-1749	44	19.5	18.5	-
SU-1750	19	76	37	-
<i>Eupatorium odoratum</i> L MeOH SU-1466	50µg/ml	-	-	-
compound sakuranetin SU-1751	20	20.5	73	-
<i>Gnetum africanum</i> SU-1752	202	190	225	-
<i>Picralima nitida</i> CompoundBN79508* SU-1753	-	-	-	-
<i>Plantex vellous</i> SU-1756	75	18.5	13.5	-
<i>Plantex vellous</i> SU-1757	1.5	-	13	-
<i>Fagara lemairei</i> SU-1758	2.2	2	2.05	-
<i>Fagara lemairei</i> SU-1759	20.5	170	130	-
<i>Erythrina senegalensis</i> SU-1760	7.2	9.1	15.5	-
<i>Erythrina senegalensis</i> SU-1761	18.9	20	22	-
<i>Mitracarpus scaber</i> SU-1762	98	105	71	-
<i>Otax viride</i> SU-1763	195	32% @ 500µg/ml	235	-
<i>Chasmanthera dependens</i> SU-1764	225	225	-	-
<i>Glossocalyx brevipes</i> ext SU-1464	0.77	-	-	-
<i>Glossocalyx brevipes</i> Neutral fraction SU-1768	0.78	0.76	0.715	-

FIGURE 8

<i>Dorsternia barteri</i>	SU-1769	7.5	7.3	15.25	-
	SU-1770	16.5	19.5	16	-
	SU-1771	54	60	-	-
	SU-1772	50	47	-	-
	SU-1773	210	210	-	-
<i>Garcinia kola</i> Heckel					
Pentamidine		0.00048	0.00186	0.00192	0.003
Melarsen Oxide		0.00077	0.0025	0.0066	0.0072
(-)	= not tested				
SU	= Submitter number.				

FIGURE 8 Continued

Fig. 9

Table 4

Minimum Inhibitory concentration (MIC) of Plant Extracts against *Trichomonas vaginalis* strain CI-NIH

		MIC (mg/ml)		
	Lab. No	CI-NIH 48 hrs	CDC-085 48 hrs	KV-1 48 hrs
<i>Gongronema latifolium</i>	SU-105	>2.50	2.50	2.50
<i>Dracaena mannii</i>	SU-175	2.50	2.50	2.50
<i>Picralima nitida</i>	SU-367	12.50	12.50	0.78
<i>Picralima nitida</i>	SU-369	0.62	1.25	1.25
<i>Picralima nitida</i>	SU-370	2.50	2.50	2.50
<i>Gongronema latifolium</i> CHCl <sub>3</sub>	SU-614	1.25	0.62	1.25
<i>Albizia ferruginea</i> hex	SU-679	0.62	0.62	0.62
Grape fruit seed 2032	SU-719	0.31	0.01	0.15
<i>Araliopsis tabouensis</i> MeOH fr	SU-724	0.62	0.62	2.50
<i>Morinda lucida</i> DCM	SU -740	1.25	1.25	1.25
<i>Aframomum melegueta</i> hex	SU-766	1.25	1.25	2.50
<i>Kigelia africana</i> MeOH	SU-769	0.31	0.62	0.62
<i>Aframomum melegueta</i> CHCl <sub>3</sub>	SU-787	0.62	1.25	2.50
<i>Aframomum melegueta</i> MeOH	SU-798	1.25	0.62	.25
<i>Uvaria chamae</i> rt DCM	SU-799	0.15	0.31	0.62
<i>Aframomum melegueta</i> aqueous	SU-813	2.50	2.50	0.15
<i>Picralima nitida</i> PNP-2	SU-846	2.50	1.25	2.50
<i>Picralima nitida</i> PNP-4	SU-847	2.50	2.50	2.50
<i>Picralima nitida</i> PNP-8	SU-848	2.50	2.50	2.50
Metronidazole		0.003	0.40	0.004